

IN THE CLAIMS

Please amend the Claims as follows:

1. (Original) A method for producing osseoinductive extracellular material from skeletal cells which method comprises or consists of the steps of:
  - (1) culturing skeletal cells in a suitable culture medium;
  - (2) harvesting extracellular material produced by said cultured cells; and optionally isolating and/or purifying said harvested material;
  - (3) lyophilizing said material; and
  - (4) irradiating said material with gamma radiation.
2. (Original) A method according to claim 1 including the additional step of adding a radioprotectant moiety to the material prior to said irradiating step (4).
3. (Original) A method according to claim 1 wherein the material contains a radioprotectant moiety prior to said irradiating step (4).
4. (Currently Amended) A method according to claim 1 ~~or 2 or 3~~ including the additional step of:
  - (5) adding a physiologically acceptable diluent and/or excipient and/or adjuvant and/or carrier, to form a therapeutic composition.
5. (Currently Amended) A material produced by the method of claim 1 ~~or 2 or 3~~.
6. (Original) A material according to claim 5 which is substantially free of bacteria and viruses.
7. (Original) A composition produced by the method of claim 4.

8. (Original) A composition according to claim 7 which is substantially or completely free of bacteria and viruses.
9. (Currently Amended) A method of treating a patient (human or other animal) requiring bone repair/regeneration, which involves administering to said patient an osseoinductive amount of a material according to claim 5 ~~or 6~~.
10. (Currently Amended) A method of treating a patient (human or other animal) requiring bone repair/regeneration, which involves administering to said patient an osseoinductive amount of a composition according to claim 6 ~~or 7~~.
11. Canceled.
12. Canceled.
13. (Currently Amended) A composition according to claim 7 ~~or 8~~ in frozen form.
14. (Currently Amended) A composition according to claim 7 ~~or 8~~ in frozen-thawed form.
15. (Currently Amended) A composition according to claim 7 ~~or 8~~ in freeze-dried form.
16. (Currently Amended) A method according to claims 1 ~~to 4~~ wherein said material is obtained from cartilage cells.
17. (Original) A method according to claim 16 wherein said material is obtained from hypertrophic cartilage cells.

18. (Original) A method according to claim 17 wherein said material is obtained from immortalised hypertrophic chondrocyte cells.
19. (Currently Amended) A method according to claims 16 ~~to 18~~ wherein said material is obtained from a human cell.
20. (Original) A method according to claim 19 wherein said material is obtained from a human cell line.
21. (Currently Amended) A method according to claims 1 ~~to 4~~ wherein said material contains a mixture of: (1) one or more cytokine; (2) one or more growth factor; and (3) one or more collagen.
22. (Currently Amended) A method according to claim 2 ~~or 3~~ wherein said radioprotectant moiety comprises ~~or consists of~~ a free radical scavenger.
23. (Currently Amended) A method according to claim 2 ~~or 3~~ wherein said radioprotectant moiety comprises ~~or consists of~~ an anti-oxidant.
24. (Currently Amended) A method according to claims 1 ~~to 4~~ wherein said irradiating step (4) is at a dose in the range 100Gy to 45kGy.
25. (Currently Amended) A method according to claims 1 ~~to 4~~ wherein said irradiating step (4) is at a dose in the range 5kGy to 45kGy.
26. (Currently Amended) A method according to claims 1 ~~to 4~~ wherein said irradiating step (4) is at a dose in the range 5kGy to 20kGy.

27. (Currently Amended) A method according to claims 1 ~~to~~ 4 wherein said irradiating step (4) is at a dose selected from the group consisting of 5kGy, 10kGy, 15kGy, and 20kGy.

28. (Currently Amended) A method according to claims 1 ~~to~~ 4 wherein said irradiating step (4) is carried out at a temperature in the range -30°C to +80°C.

29. (Currently Amended) A method according to claims 1 ~~to~~ 4 wherein said irradiating step (4) is carried out at about room temperature.

30. (Currently Amended) A method according to claims 1 ~~to~~ 4 wherein said irradiating step (4) is carried out at or below room temperature.

31. (Currently Amended) A method according to claims 1 ~~to~~ 4 wherein said irradiating step (4) is carried out at or above room temperature.

32. (Currently Amended) A method of treatment according to claim 9 ~~or~~ 10 wherein said osseointegrative material or composition is used in conjunction with a medical device, whereby the material promotes/augments supplemental bone formation in, on or around the device.

33. (Currently Amended) A method of treatment according to claim 9 ~~or~~ 10 wherein said osseointegrative material or composition is administered for bone repair/regeneration in a medical indication selected from the group consisting of: bone fractures; surgical bone loss e.g. resulting from removal of cancerous bone, craniomaxillofacial surgery and cranioplasty; joint revision including hip, knee, shoulder, and small joint replacements; bone trauma including all orthopaedic and craniomaxillofacial fractures e.g. spinal fusion following laminectomy inclusive of total disc prosthesis and nuclear prosthesis; osteoporetic fractures and bony spinal injury; congenital bone defects e.g. osteogenesis imperfecta; bone structures requiring supplementation such as bone void filling e.g. following a craniotomy; osteoporosis; and periodontal defects such

as oral and periodontal repair including the filling of intrabony voids and alveolar ridge augmentation and voids in the jawbone; periodontal repair of alveolar bone and preparation of alveolar bone for implants and prostheses; and supplementation/augmentation of bone formation in combination with prostheses, including joints (hip, knee, ankle, elbow), dental implants, maxillofacial devices and spine devices.

34. Canceled.

35. Canceled.

36. Canceled.